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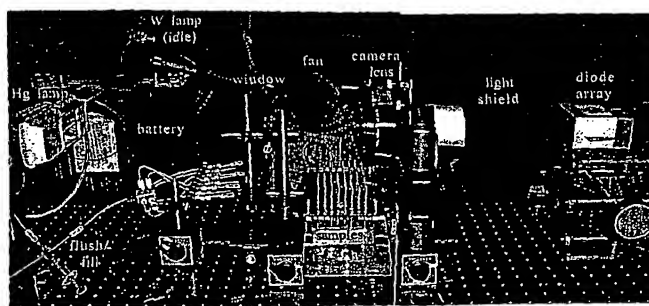
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- (74) Agents: **LARCHER, Carol et al.**; Leydig, Voit & Mayer, LTD, Suite 4900, Two Prudential Plaza, 180 N. Stetson, Chicago, IL 60601-6780 (US).
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- (71) Applicant (for all designated States except US): **IOWA STATE UNIVERSITY RESEARCH FOUNDATION, INC.** [US/US]; 310 Lab of Mechanics, Ames, IA 50011-2131 (US).
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- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **YEUNG, Edward, S.** [US/US]; 1005 Jarrett Circle, Ames, IA 50014 (US).  
**GONG, Xiaoyi** [CN/US]; 118F University Village, Ames, IA 50010 (US).

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(54) Title: **METHOD OF ANALYZING MULTIPLE SAMPLES SIMULTANEOUSLY BY DETECTING ABSORPTION AND SYSTEMS FOR USE IN SUCH A METHOD**



WO 01/18528 A1

(57) Abstract: The present invention provides a method of analyzing multiple samples simultaneously by absorption detection. The method comprises: (i) providing a planar array of multiple containers, each of which contains a sample comprising at least one absorbing species, (ii) irradiating the planar array of multiple containers with a light source and (iii) detecting absorption of light with a detection means that is in line with the light source at a distance of at least about 10 times a cross-sectional distance of a container in the planar array of multiple containers. The absorption of light by a sample indicates the presence of an absorbing species in it. The method can further comprise: (iv) measuring the amount of absorption of light detected in (iii) indicating the amount of the absorbing species in the sample. Also provided by the present invention is a system for use in the above method. The system comprises: (i) a light source comprising or consisting essentially of at least one wavelength of light, the absorption of which is to be detected, (ii) a planar array of multiple containers, and (iii) a detection means that is in line with the light source and is positioned in line with and parallel to the planar array of multiple containers at a distance of at least about 10 times a cross-sectional distance of a container.